# 9. Schematic Diagrams


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**Note**

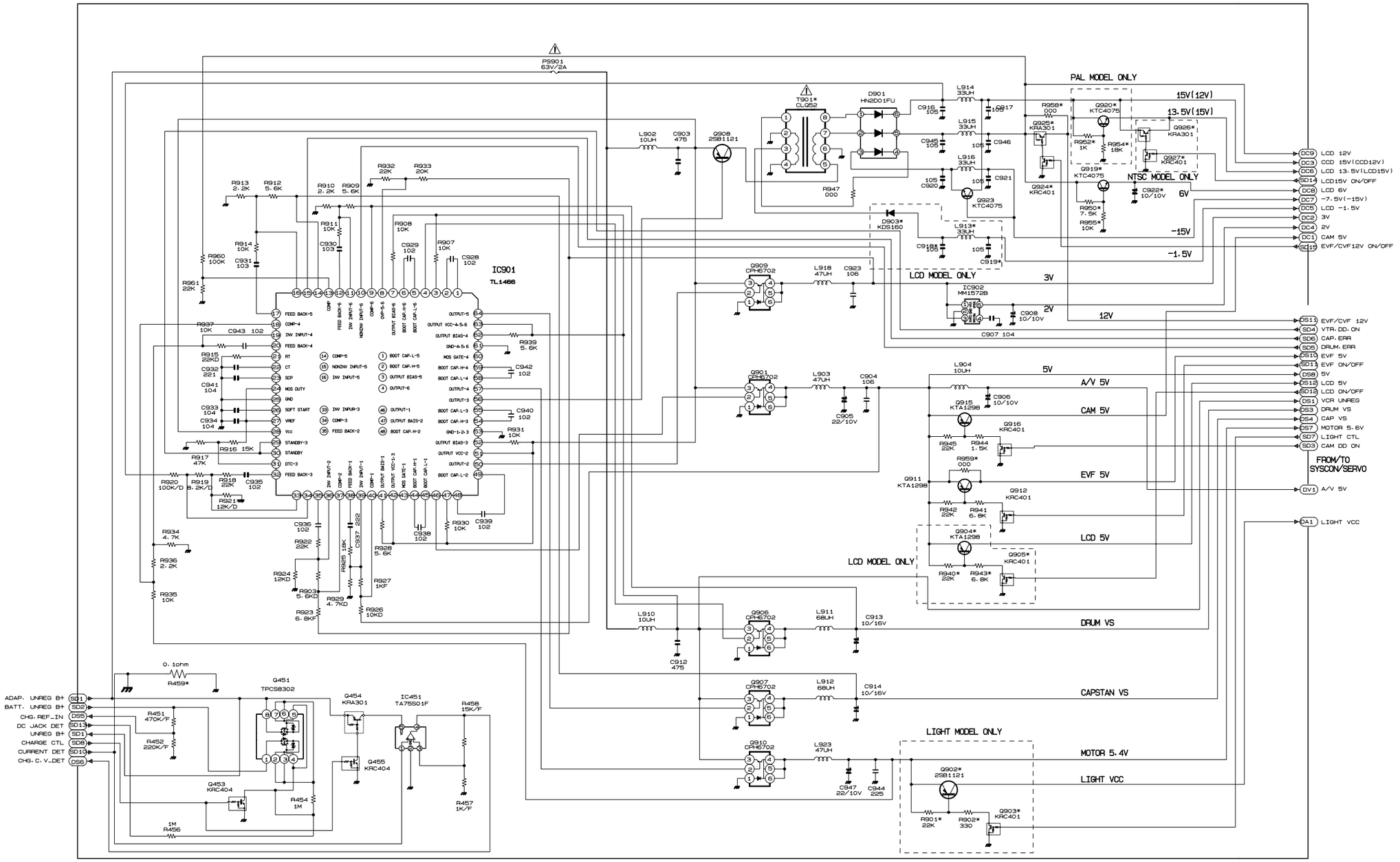
For schematic Diagram
- Resistors are in ohms, 1/8W unless otherwise noted.
- Circled numbers refer to waveforms.

**Special note :**
Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the “electrostatically sensitive (ES) devices” section of this service manual.

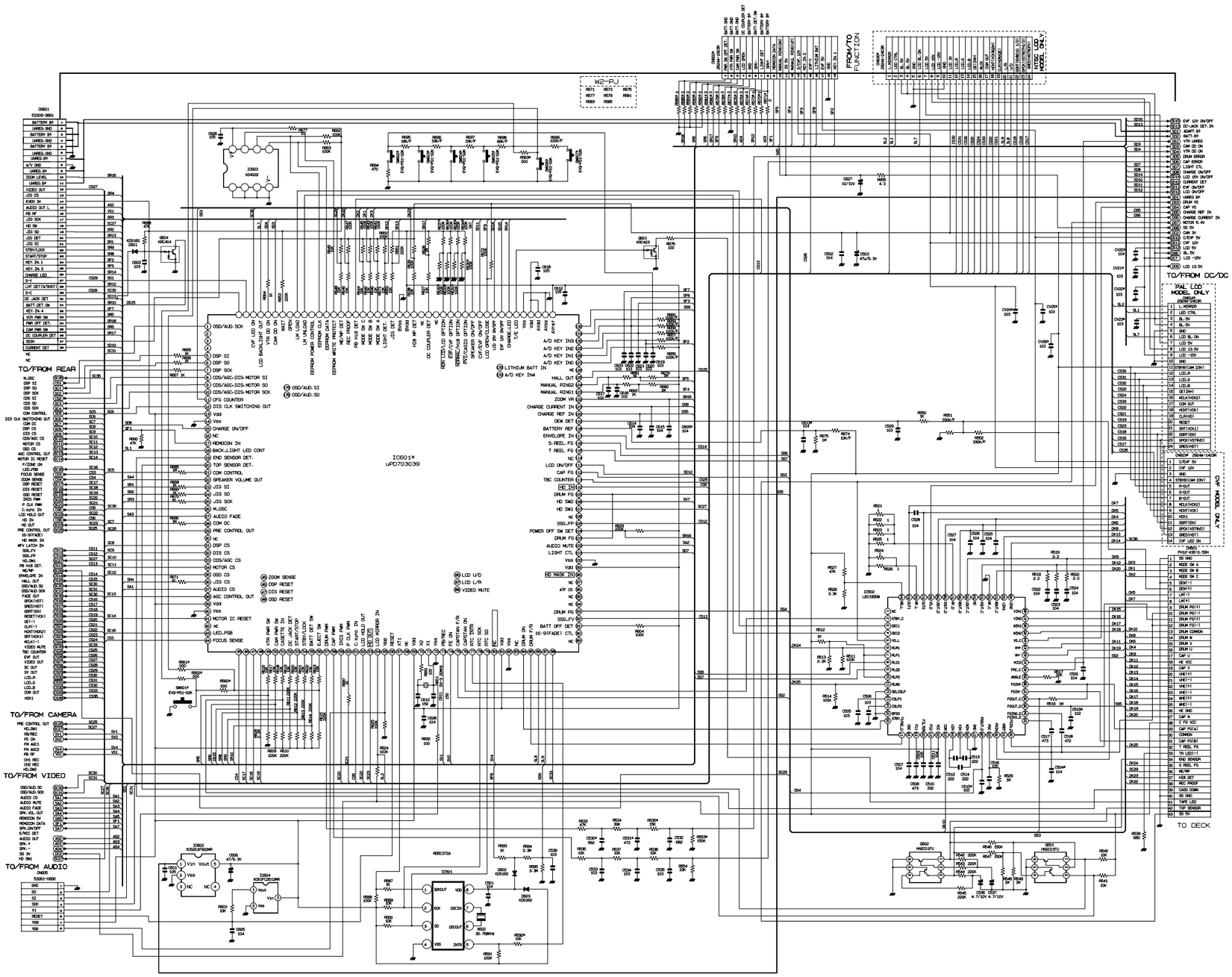
**Note :**
Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

**Important safety notices :**
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components. Use only the same type.

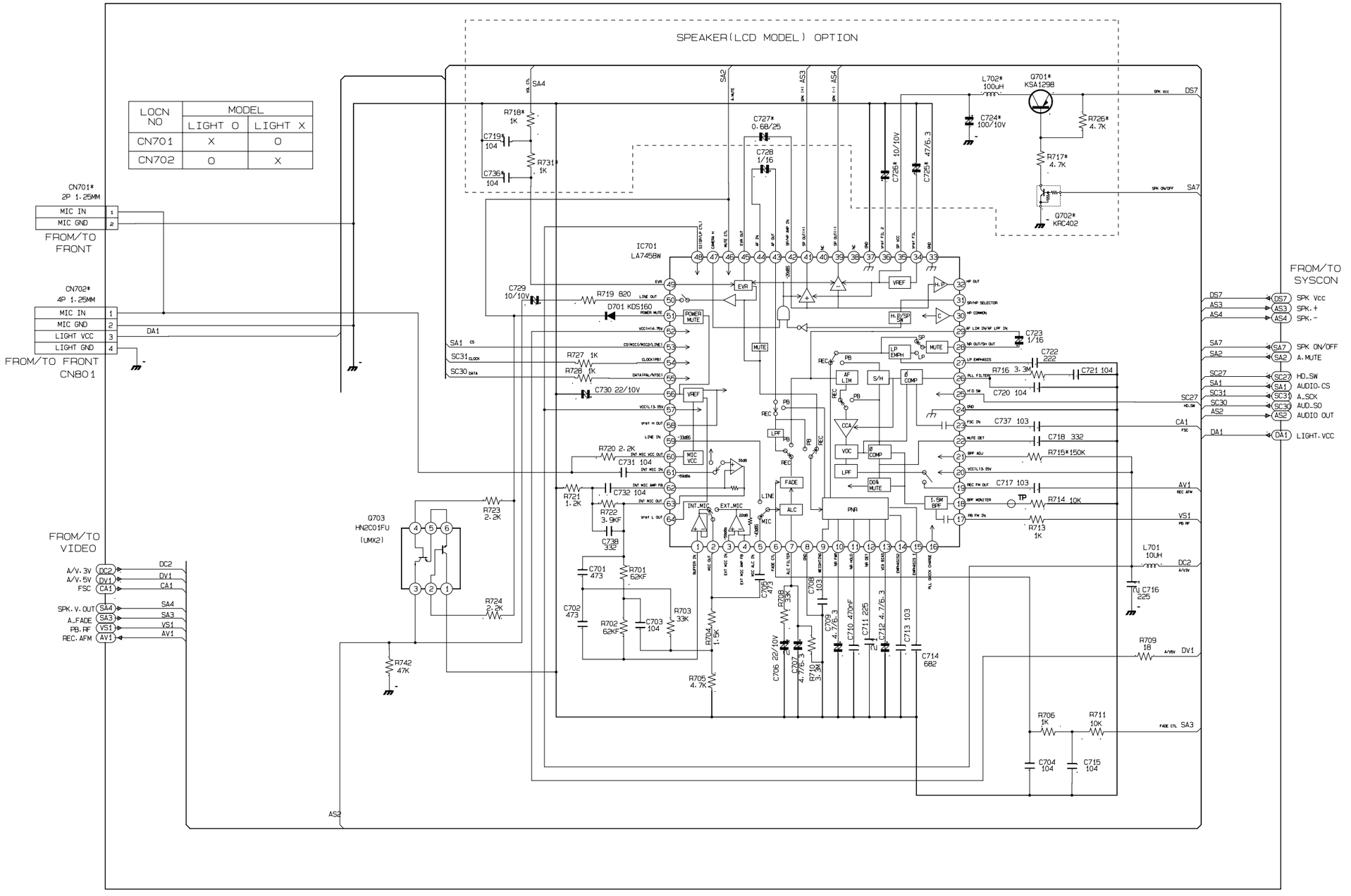
## 9-1 DC/DC Converter (Main)



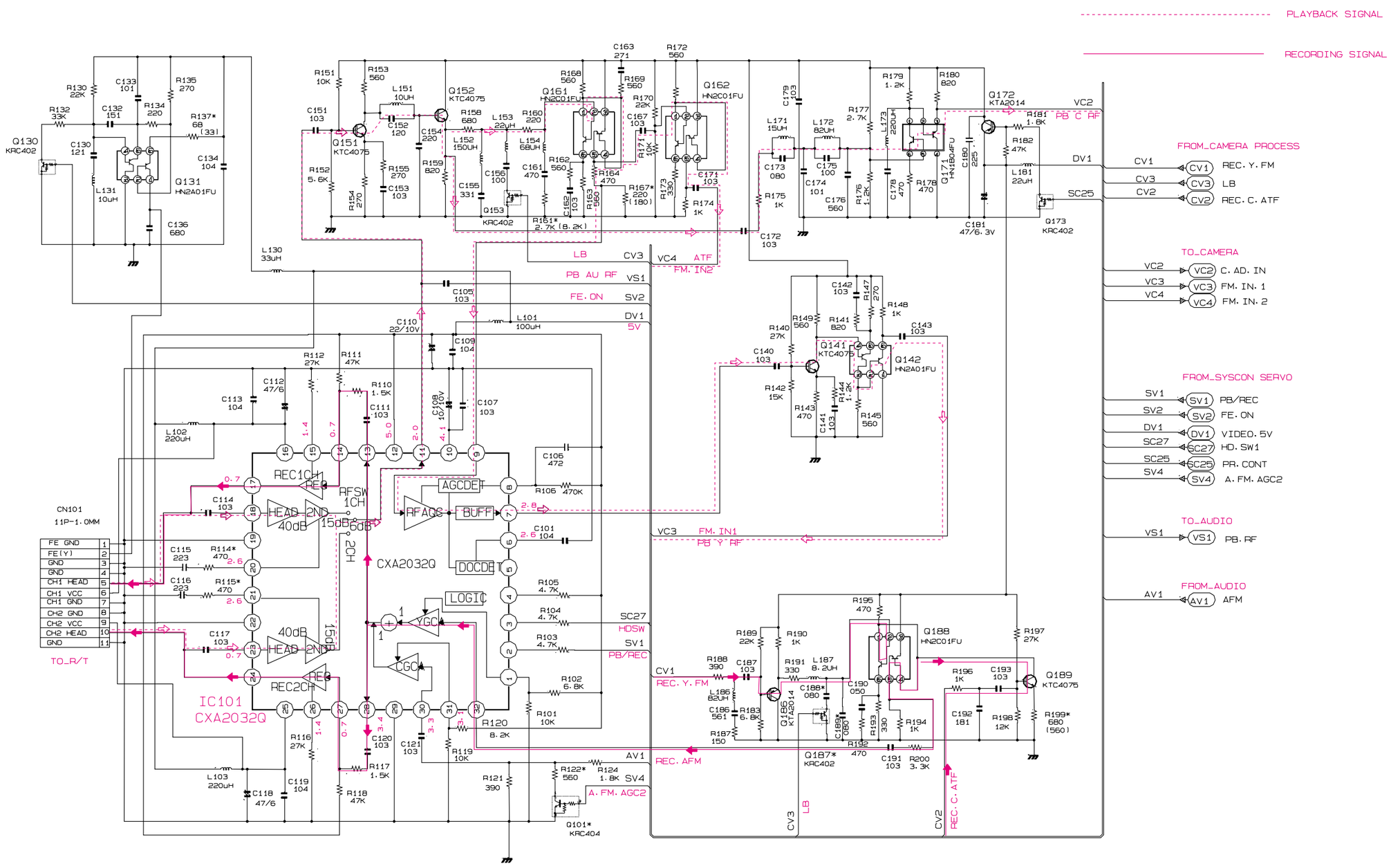
## 9-2 System Control (Main)



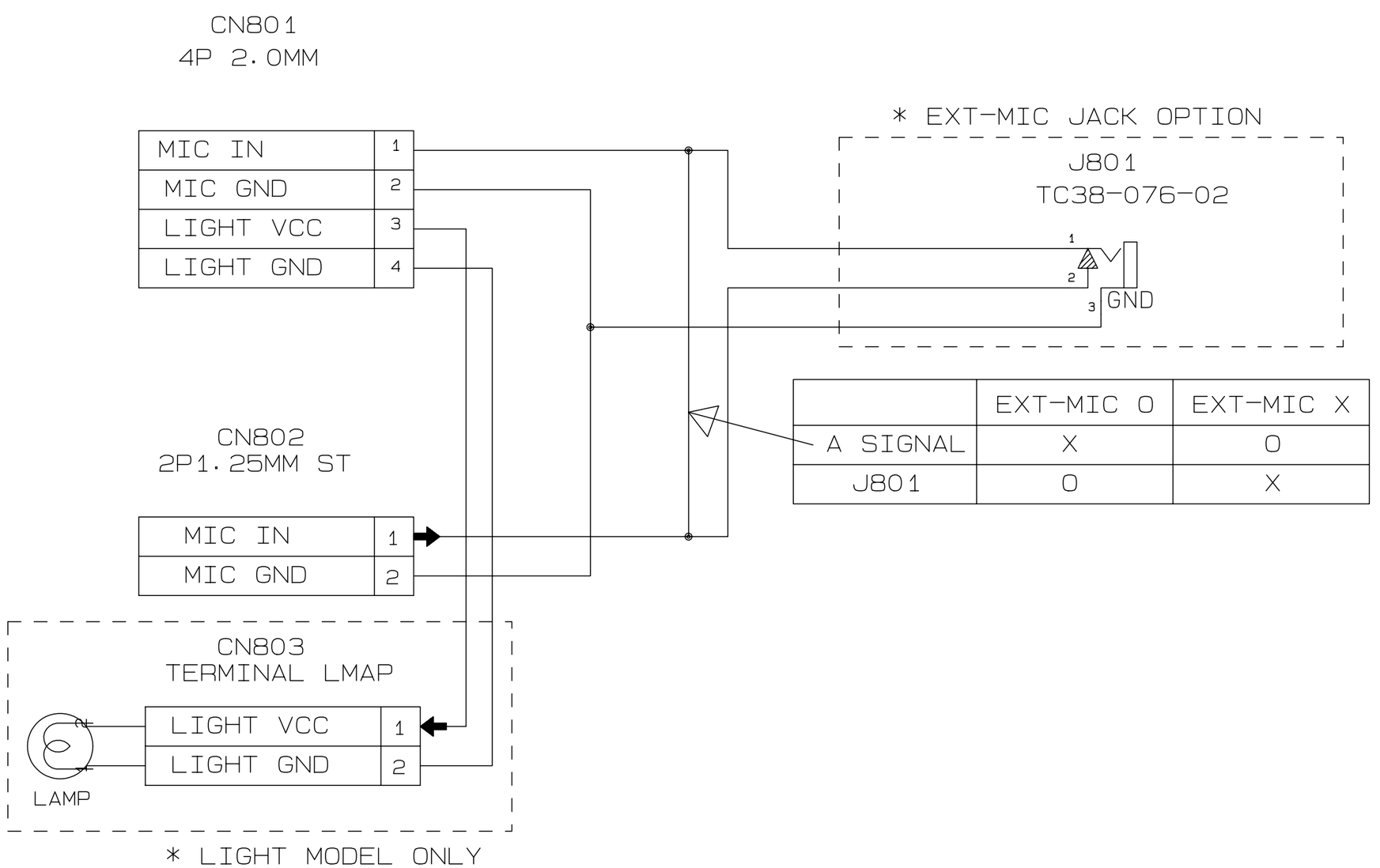
## 9-3 Audio (Main)



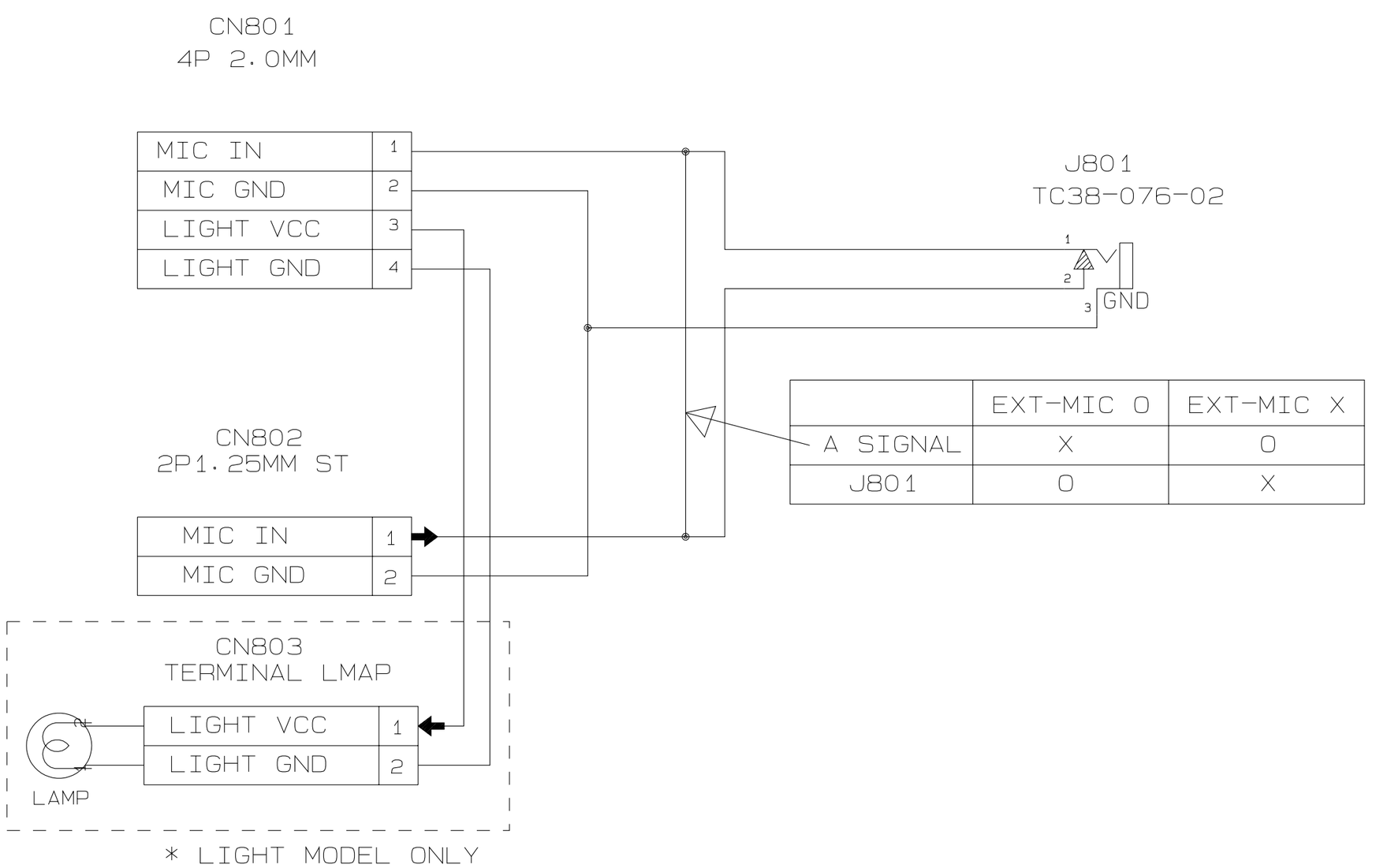
## 9-4 Pre-Amp (Main)



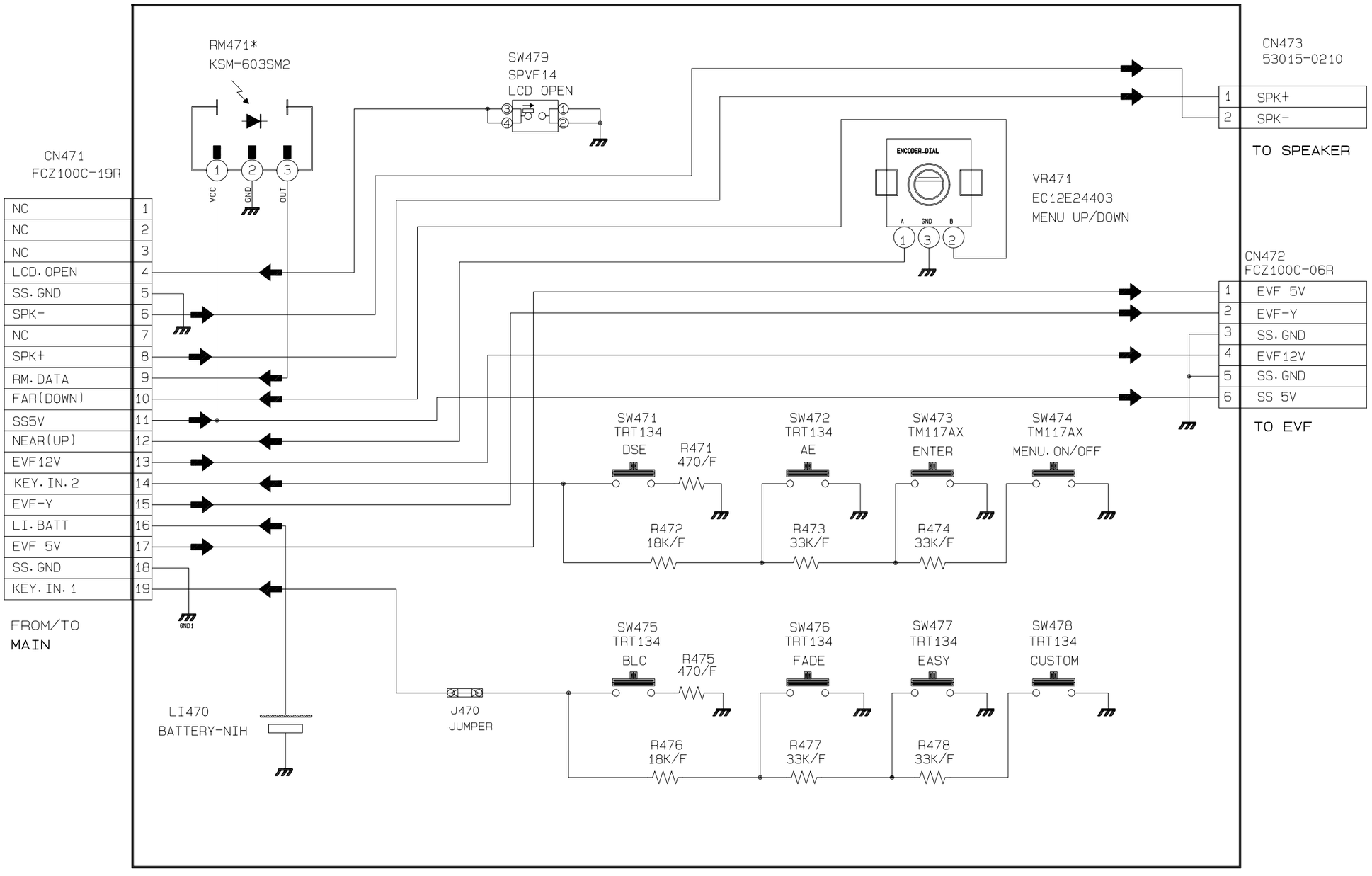
## 9-5 Rear


CN801
4P 2.0MM
MIC IN 1
MIC GND 2
LIGHT VCC 3
LIGHT GND 4
* EXT-MIC JACK OPTION
J801
TC38-076-02
1
2
3
GND
EXT-MIC O
EXT-MIC X
A SIGNAL
X
O
J801
O
X
CN802
2P1.25MM ST
MIC IN 1
MIC GND 2
CN803
TERMINAL LMAP
LIGHT VCC 1
LIGHT GND 2
LAMP
* LIGHT MODEL ONLY

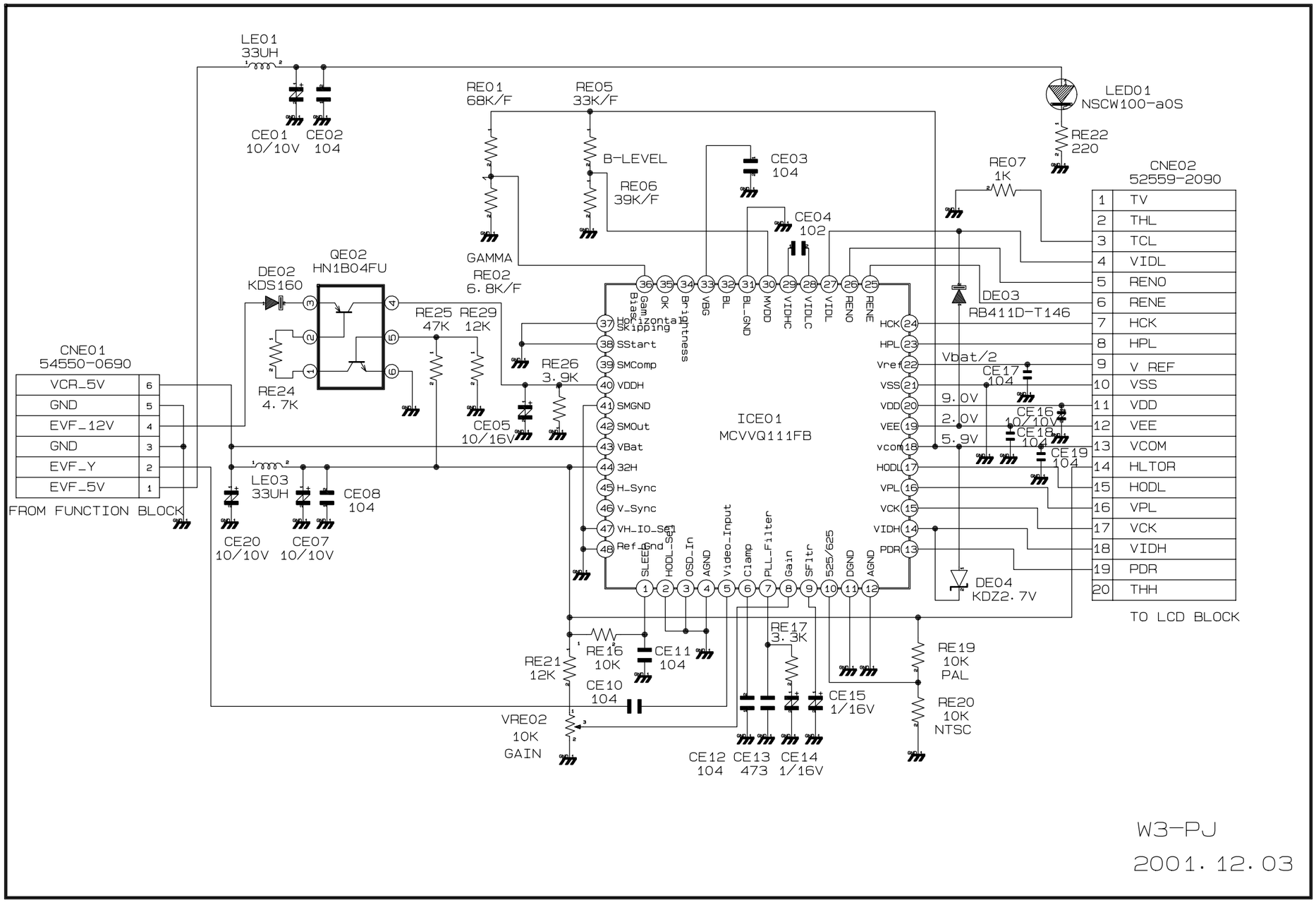
## 9-6 Front


CN801
4P 2.0MM
MIC IN 1
MIC GND 2
LIGHT VCC 3
LIGHT GND 4
J801
TC38-076-02
1
2
3
GND
EXT-MIC O
EXT-MIC X
A SIGNAL X O
J801 O X
CN802
2P1.25MM ST
MIC IN 1
MIC GND 2
CN803
TERMINAL LMAP
LIGHT VCC 1
LIGHT GND 2
LAMP
* LIGHT MODEL ONLY

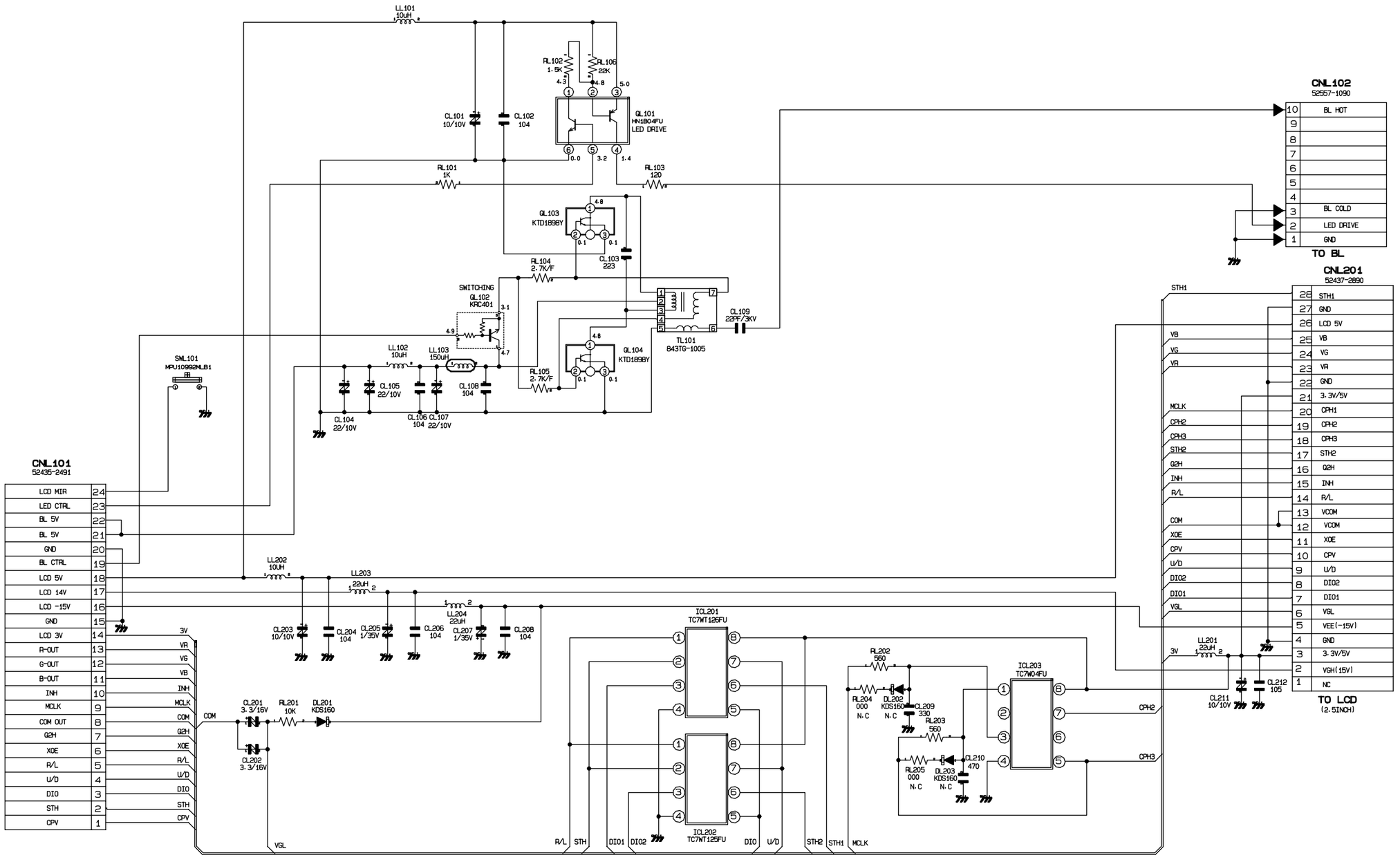
## 9-7 Function


RM471*
KSM-603SM2
VCC
GND
OUT
SW479
SPVF14
LCD OPEN
CN473
53015-0210
1 SPK+
2 SPK-
TO SPEAKER
CN471
FCZ100C-19R
NC 1
NC 2
NC 3
LCD. OPEN 4
SS. GND 5
SPK- 6
NC 7
SPK+ 8
RM. DATA 9
FAR(DOWN) 10
SS5V 11
NEAR(UP) 12
EVF12V 13
KEY. IN. 2 14
EVF-Y 15
LI. BATT 16
EVF 5V 17
SS. GND 18
KEY. IN. 1 19
FROM/TO
MAIN
ENCODER_DIAL
A GND B
VR471
EC12E24403
MENU UP/DOWN
CN472
FCZ100C-06R
1 EVF 5V
2 EVF-Y
3 SS. GND
4 EVF12V
5 SS. GND
6 SS 5V
TO EVF
SW471
TRT134
DSE
R471
470/F
SW472
TRT134
AE
SW473
TM117AX
ENTER
SW474
TM117AX
MENU. ON/OFF
R472
18K/F
R473
33K/F
R474
33K/F
SW475
TRT134
BLC
R475
470/F
SW476
TRT134
FADE
SW477
TRT134
EASY
SW478
TRT134
CUSTOM
R476
18K/F
R477
33K/F
R478
33K/F
LI470
BATTERY-NIH
J470
JUMPER
GND1

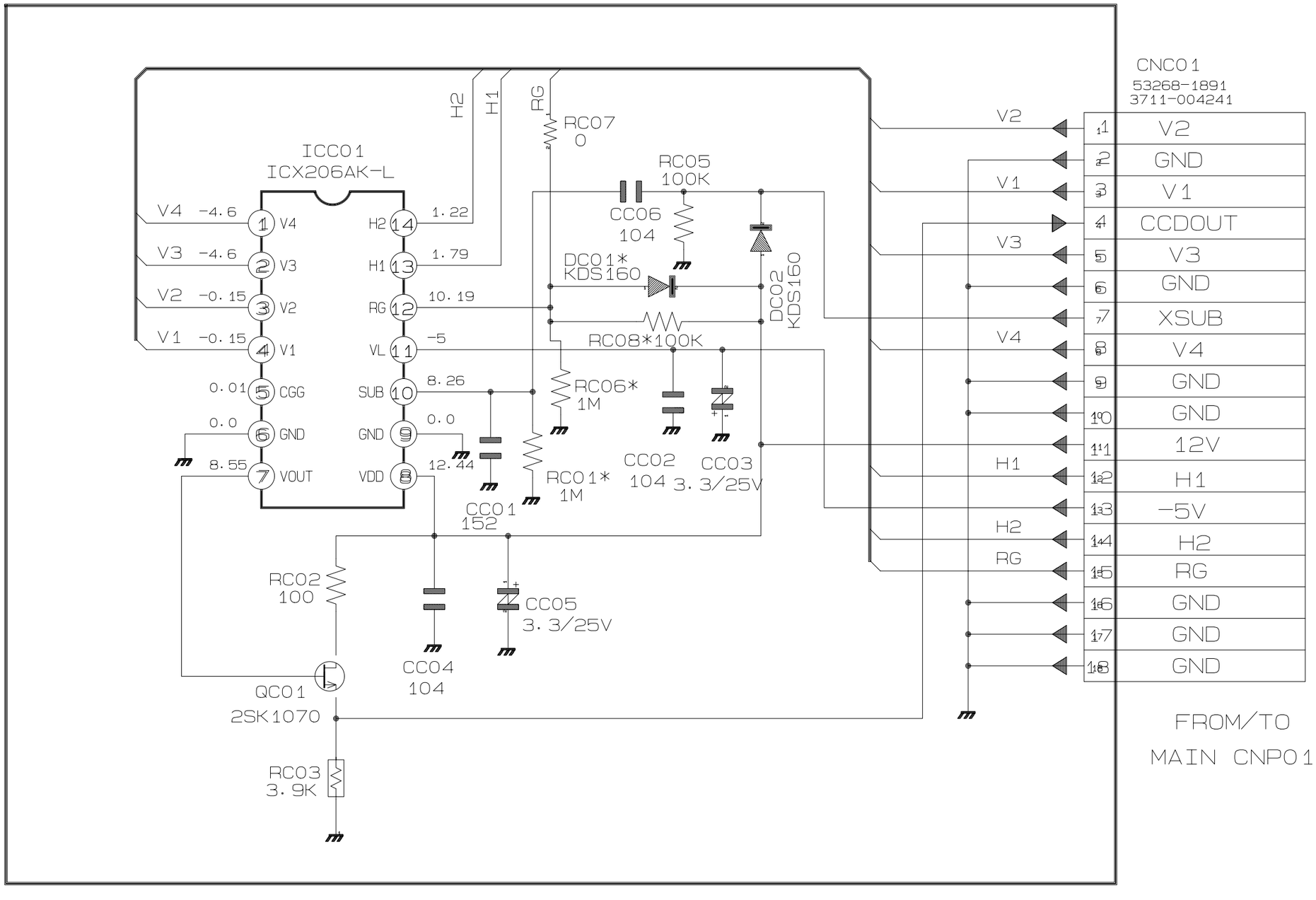
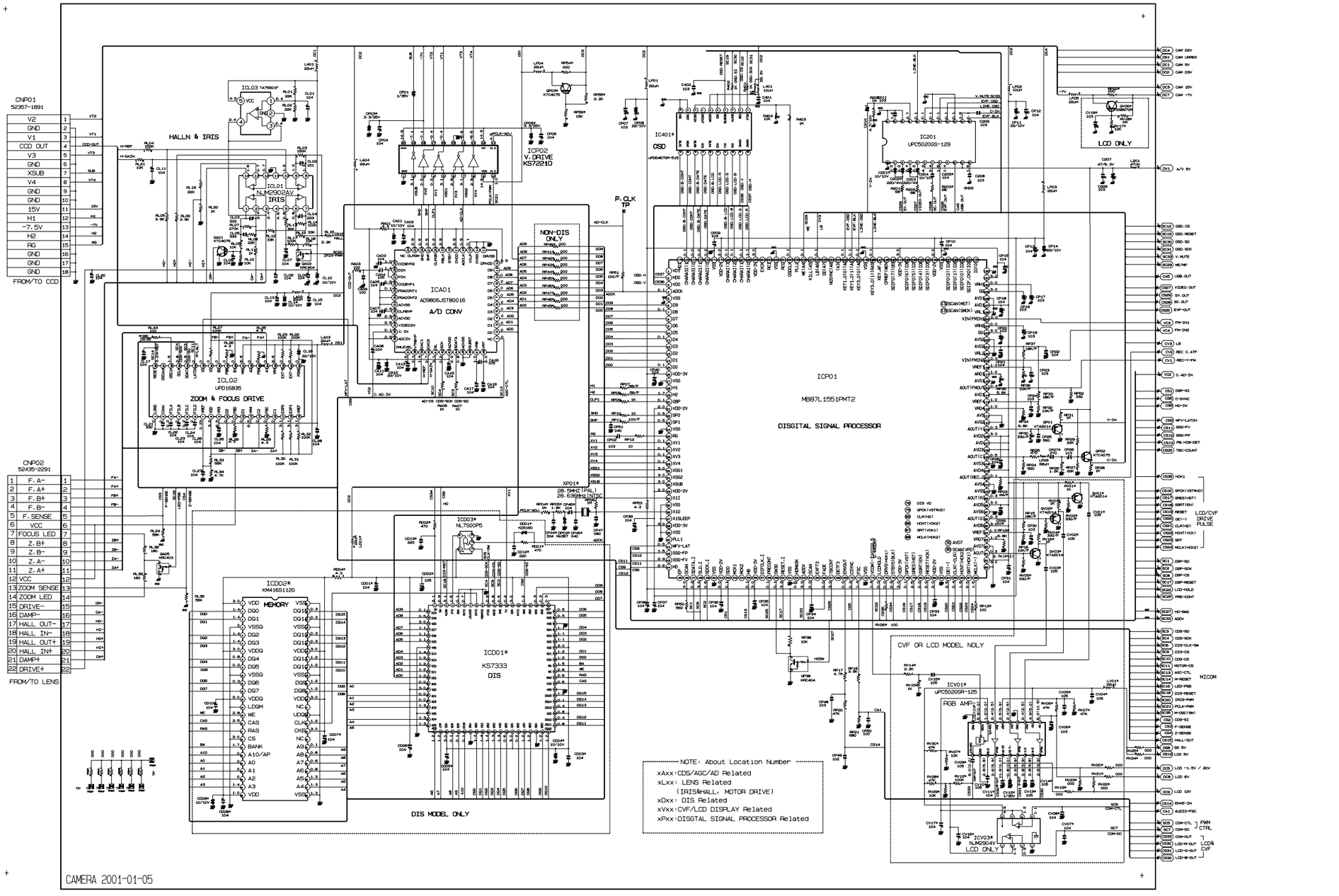
## 9-8 EVF


LE01
33UH
CE01
10/10V
CE02
104
RE01
68K/F
RE05
33K/F
B-LEVEL
RE06
39K/F
CE03
104
CE04
102
GAMMA
RE02
6.8K/F
LED01
NSCW100-a0S
RE22
220
RE07
1K
CNE02
52559-2090
1 TV
2 THL
3 TCL
4 VIDL
5 RENO
6 RENE
7 HCK
8 HPL
9 V_REF
10 VSS
11 VDD
12 VEE
13 VCOM
14 HLTOR
15 HODL
16 VPL
17 VCK
18 VIDH
19 PDR
20 THH
TO LCD BLOCK
DE03
RB411D-T146
Vbat/2
CE17
104
9.0V
2.0V
5.9V
CE16
10/10V
CE18
104
CE19
104
QE02
HN1B04FU
DE02
KDS160
RE24
4.7K
RE25
47K
RE29
12K
RE26
3.9K
CE05
10/16V
CNE01
54550-0690
VCR_5V 6
GND 5
EVF_12V 4
GND 3
EVF_Y 2
EVF_5V 1
FROM FUNCTION BLOCK
LE03
33UH
CE08
104
CE20
10/10V
CE07
10/10V
ICE01
MCVVQ111FB
37 Horizontal Skipping
38 SStart
39 SMComp
40 VDDH
41 SMGND
42 SMOut
43 VBat
44 32H
45 H_Sync
46 V_Sync
47 VH_IO_Sel
48 Ref_Gnd
Gam Bias
OK
Brightness
VBG
BL
BL_GND
MVDD
VIDHC
VIDLC
VIDL
RENO
RENE
HCK 24
HPL 23
Vref 22
VSS 21
VDD 20
VEE 19
vcom 18
HODL 17
VPL 16
VCK 15
VIDH 14
PDR 13
1 SLEEP
2 HODL_Sel
3 OSD_In
4 AGND
5 Video_Input
6 Clamp
7 PLL_Filter
8 Gain
9 SFltr
10 525/625
11 DGND
12 AGND
DE04
KDZ2.7V
RE16
10K
CE11
104
RE21
12K
CE10
104
VRE02
10K
GAIN
RE17
3.3K
CE15
1/16V
CE12
104
CE13
473
CE14
1/16V
RE19
10K
PAL
RE20
10K
NTSC
W3-PJ
2001.12.03

## 9-9 LCD


CNL101
52435-2491
LCD MIR 24
LED CTRL 23
BL 5V 22
BL 5V 21
GND 20
BL CTRL 19
LCD 5V 18
LCD 14V 17
LCD -15V 16
GND 15
LCD 3V 14
R-OUT 13
G-OUT 12
B-OUT 11
INH 10
MCLK 9
COM OUT 8
G2H 7
XOE 6
R/L 5
U/D 4
DIO 3
STH 2
CPV 1
LL101 10uH
RL102 1.5K
RL106 22K
CL101 10/10V
CL102 104
GL101 HN1B04FU LED DRIVE
RL101 1K
RL103 120
GL103 KTD1898Y
CL103 223
RL104 2.7K/F
SWITCHING
GL102 KRC401
CL109 22PF/3KV
TL101 843T6-1005
GL104 KTD1898Y
LL102 10uH
LL103 150uH
RL105 2.7K/F
CL104 22/10V
CL105 22/10V
CL106 104
CL107 22/10V
CL108 104
SWL101 MPU1099SMLB1
LL202 10UH
LL203 22UH
LL204 22UH
CL203 10/10V
CL204 104
CL205 1/35V
CL206 104
CL207 1/35V
CL208 104
CL201 3.3/16V
RL201 10K
DL201 KDS160
CL202 3.3/16V
ICL201 TC7WT126FU
ICL202 TC7WT125FU
RL202 560
RL204 000 N.C
DL202 KDS160 N.C
CL209 330
RL203 560
RL205 000 N.C
DL203 KDS160 N.C
CL210 470
ICL203 TC7W04FU
LL201 22uH
CL211 10/10V
CL212 105
CNL102
52557-1090
10 BL HOT
3 BL COLD
2 LED DRIVE
1 GND
TO BL
CNL201
52437-2890
28 STH1
27 GND
26 LCD 5V
25 VB
24 VG
23 VR
22 GND
21 3.3V/5V
20 CPH1
19 CPH2
18 CPH3
17 STH2
16 G2H
15 INH
14 R/L
13 VCOM
12 VCOM
11 XOE
10 CPV
9 U/D
8 DIO2
7 DIO1
6 VGL
5 VEE(-15V)
4 GND
3 3.3V/5V
2 VGH(15V)
1 NC
TO LCD
(2.5INCH)
3V
VR
VG
VB
INH
MCLK
COM
G2H
XOE
R/L
U/D
DIO
STH
CPV
VGL
CPH2
CPH3
R/L
STH
DIO1
DIO2
DIO
U/D
STH2
STH1
MCLK

## 9-10 CCD


ICC01
ICX206AK-L
V4 -4.6
V3 -4.6
V2 -0.15
V1 -0.15
0.01
0.0
8.55
1 V4
2 V3
3 V2
4 V1
5 CGG
6 GND
7 VOUT
H2 14 1.22
H1 13 1.79
RG 12 10.19
VL 11 -5
SUB 10 8.26
GND 9 0.0
VDD 8 12.44
H2
H1
RG
RC07
0
RC05
100K
CC06
104
DC01*
KDS160
DC02
KDS160
RC08*100K
RC06*
1M
RC01*
1M
CC01
152
CC02
104
CC03
3.3/25V
RC02
100
CC04
104
CC05
3.3/25V
QC01
2SK1070
RC03
3.9K
CNC01
53268-1891
3711-004241
1 V2
2 GND
3 V1
4 CCDOUT
5 V3
6 GND
7 XSUB
8 V4
9 GND
10 GND
11 12V
12 H1
13 -5V
14 H2
15 RG
16 GND
17 GND
18 GND
V2
V1
V3
V4
H1
H2
RG
FROM/TO
MAIN CNP01

## 9-11 CAMERA (Main)